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Documentation Supplement for EPA Modeling Applications (V.2.1.6) Using the Integrated Planning Model

Background: The Integrated Planning Model (IPM) is a multi-regional, dynamic, deterministic linear programming model of the U.S. electric power sector. It provides forecasts of least- cost capacity expansion, electricity dispatch, and emission control strategies for meeting energy demand and environmental, transmission, dispatch, and reliability constraints. IPM can be used to evaluate the cost and emissions impacts of proposed policies to limit emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x) , carbon dioxide (CO₂), and mercury (Hg) from the electric power sector. IPM is used by the U.S. Environmental Protection Agency (EPA) to project the impact of emissions policies on the electric power sector in the 48 contiguous states and the District of Columbia. The assumptions underlying EPA's Base Case and associated policy cases were incorporated in IPM under EPA direction by ICF Resources, Inc. IPM was developed by ICF and is used in support of its public and private sector clients. IPM® is a registered trademark of ICF Resources, Inc.

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**U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW (6204N)
Washington, D.C. 20460
(www.epa.gov/airmarkets)**

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This report documents a series of updates that were incorporated in EPA modeling applications using the Integrated Planning Model (IPM) in the Spring of 2003. Designated Version 2.1.6, the latest available data were used to update key model parameters in the EPA Base Case and associated policy cases in preparation for performing analyses in conjunction with Congressional consideration of the Administration's Clear Skies Initiative.

This report is a supplement to the comprehensive documentation of EPA's applications of IPM as reported in *Documentation of EPA Modeling Applications (V.2.1) Using the Integrated Planning Model*, EPA 430/R-02-004, which is available for viewing and downloading at www.epa.gov/airmarkets/epa-ipm. This supplementary report consists of a Summary Table listing the v.2.1.6 updates and a series of attachments providing details of specific updates. To help readers track the parameters that were updated, the Master Table contains cross references to the earlier documentation report. Parameters not included in the Master Table remained unchanged.

Table of Contents

Summary Table of V.2.1.6 Updates

Attachments

- A- Aggregation Scheme in v.2.1.6
- B - Electricity Demand Growth in V.2.1.6
- C - State Multipollutant Regulations Incorporated in v.2.1.6
- D - New Source Review (NSR) Settlements in v.2.1.6
- E - Emission Rate and Removal Assumptions For Potential (New) Units: Comparison of v.2.1 and v.2.1.6
- F - Emission Controls on Existing Units in v.2.1.6
- G - Planned-Committed Units in NEEDS, v.2.1.6
- H - Performance and Unit Cost Assumptions for Potential (New) Capacity from Conventional Fossil Technologies in v. 2.1.6
- I - Existing Nuclear Unit Cost Assumptions in v.2.1.6
- J - Nuclear Upratings and Scheduled Retirements (MW) as Incorporated in v.2.1.6 from AEO 2003
- K - Mercury Emission Modification Factors Used in v.2.1.6
- L1 - Activated Carbon Injection (ACI) Cost Equations in v.2.1.6 (Part I)
- L2 - Activated Carbon Injection (ACI) Cost Equations in v.2.1.6 (Part II)
- M - AEO 2003 Coal Supply Labor Productivity and Transportation Escalator Assumptions Used in v2.1.6
- N - Natural Gas Supply Curves and Seasonal Transportation Adders in V.2.1.6
- O - AEO 2003 Fuel Oil Prices Used in v.2.1.6